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In The Claims:

Please amend the claims as follows:

1. (currently amended) A compound of formula (1):

$$R^{1}-(A^{1}-Z^{1})_{m}-(A^{2}-Z^{2})_{n}-(A^{3}-Z^{3})_{q}-A^{4}-Z^{4}$$
 R^{5}
 R^{3}
 R^{3}

wherein R¹ represents-hydrogen, halogen, -CN, -CF₃, -CF₂H, -CFH₂, -OCF₃, -OCF₂H, -N=C=O, -N=C=S, or alkyl having from 1 to 20 carbon atoms, and any -CH₂- of the alkyl may be substituted with -O-, -S-, -CO-, -COO-, -OCO-, -CH=CH-, -CF=CF- or -C≡C-, and any hydrogen thereof may be substituted with halogen or -CN; R², R³ and R⁵ each independently

independently represent 1,4-cyclohexylene, 1,4-cyclohexenylene, 1,4-phenylene, naphthalene-

represent hydrogen or alkyl having from 1 to 3 carbon atoms; A¹, A², A³ and A⁴ each

2,6-diyl, tetrahydronaphthalene-2,6-diyl, fluorene-2,7-diyl, bicyclo[2.2.2]octane-1,4-diyl or

bicyclo[3.1.0]hexane-3,6-diyl, and in these rings, any

 $-CH_2$ - may be substituted with -O-, and any -CH= may be substituted with -N=, and in these rings, any hydrogen may be substituted with halogen or alkyl having from 1 to 5 carbon atoms; Z^1 , Z^2 and Z^3 each independently represent a single bond, $-(CH_2)_a$ -,

$$-O(CH_2)_a$$
-, $-(CH_2)_a$ O-, $-O(CH_2)_a$ O-, $-CH=CH-$, $-C\equiv C-$, $-COO-$, $-OCO-$, $-(CF_2)_2-$,

$$-C = C - COO-, -OCO-C = C-, -CH = CH-(CH_2)_2-, -(CH_2)_2-CH = CH-, -CF = CF-,$$

-C≡C-HC=CH-, or -CH=CH-C≡C-, -OCF₂-, or -CF₂O-, and a indicates an integer of from 1 to 20; Z^4 represents a single bond or α,ω-alkylene having from 1 to 4 carbon atoms, and when Z^4

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represents α , ω -alkylene having 3 or 4 carbon atoms, the -CH₂- thereof directly bonded with A⁴ may be substituted with -O-, -S-, -COO- or -OCO-; m, n and q each independently indicates 0, 1 or 2, but m+n+q \geq 1;

wherein when m+n+q=1, any -CH₂- of the alkyl represented by R^1 is not substituted with -CO- and Z^4 is a single bond; and

wherein when m+n+q=1, Z^4 is a single bond and A^4 represents 1,4-phenylene, Z^1 , Z^2 and Z^3 each is not a single bond.

- 2. (original) A compound as claimed in claim 1, in which R⁵ in formula (1) is hydrogen.
- 3. (original) A compound as claimed in claim 2, in which R² and R³ in formula (1) in claim 1 are hydrogen.
- 4. (original) A compound as claimed in claim 3, in which A¹, A², A³ and A⁴ in formula (1) in claim 1 are independently any of 1,4-cyclohexylene or 1,4-phenylene, and any hydrogen in these rings may be substituted with halogen.
- 5. (currently amended) A compound as claimed in claim 3, in which A^1 , A^2 , A^3 and A^4 in formula (1) in claim 1 are independently any of 1,4-cyclohexylene or 1,4-phenylene, and any hydrogen in these rings may be substituted with halogen; and Z^1 , Z^2 and Z^3 are independently any of a single bond, $-(CH_2)_a$, $-O(CH_2)_a$, $-(CH_2)_a$ O-, $-O(CH_2)_a$ O-,

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6. (original) A compound as claimed in claim 5, in which Z^4 in formula (1) in claim 1 is a single bond.

7. (currently amended) Any one compound of formulae (a) to (d):

$$R^1 - A^1 - Z^1 - A^4 - Z^4 - Q$$
 (a)

$$R^1 - A^1 - Z^1 - A^2 - Z^2 - A^4 - Z^4 - Z^4$$
 (b)

$$R^{1}-A^{1}-Z^{1}-A^{2}-Z^{2}-A^{3}-Z^{3}-A^{4}-Z^{4}$$
 (c)

$$R^{1}$$
 $+ (A^{1}-Z^{1})_{-2}A^{2}-Z^{2}-A^{3}-Z^{3}-A^{4}-Z^{4}- (d)_{-2}$

wherein R¹ represents-hydrogen, halogen, -CN, -CF₃, -CF₂H, -CFH₂, -OCF₃, -OCF₂H, -N=C=O, -N=C=S, or alkyl having from 1 to 20 carbon atoms, and any -CH₂- of the alkyl may be substituted with -O-, -S-, -CO-, -COO-, -OCO-, -CH=CH-, -CF=CF- or -C≡C-, and any hydrogen thereof may be substituted with halogen or -CN; A¹, A², A³ and A⁴ each independently represent 1,4-cyclohexylene, 1,4-cyclohexenylene, 1,4-phenylene, naphthalene-2,6-diyl, tetrahydronaphthalene-2,6-diyl, fluorene-2,7-diyl, bicyclo[2.2.2]octane-1,4-diyl or bicyclo[3.1.0]hexane-3,6-diyl, and in these rings, any

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-CH₂- may be substituted with -O-, and any -CH= may be substituted with -N=, and in these rings, any hydrogen may be substituted with halogen or alkyl having from 1 to 5 carbon atoms; Z^1 , Z^2 and Z^3 each independently represent a single bond, -(CH₂)_a-,

$$-O(CH_2)_a$$
-, $-(CH_2)_aO$ -, $-O(CH_2)_aO$ --, $-CH$ = CH -, $-C$ = C -, $-COO$ -, $-OCO$ -, $-(CF_2)_2$ -,

 $-C \equiv C - HC = CH - C \equiv C - CH = CH - C \equiv C - CH_2 - CH_2$

any -CH₂- of the alkyl represented by R¹ is not substituted with -CO-;

Z⁴ is a single bond; and

Z¹ is not a single bond when A⁴ represents 1.4-phenylene.

8. (currently amended) A compound as claimed in claim 7, in which R¹ in formulae (a) to (d) is-hydrogen, halogen, -CN, -CF₃, -CF₂H, -CFH₂, -OCF₃, -OCF₂H, alkyl having from 1 to 10 carbon atoms, alkoxy having from 1 to 10 carbon atoms, alkoxyalkyl having from 2 to 10 carbon atoms, or alkenyl having from 2 to 10 carbon atoms; A¹, A², A³ and A⁴ are independently any of 1,4-cyclohexylene or 1,4-phenylene, and in these rings, any hydrogen may be substituted with

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halogen; Z^1 , Z^2 and Z^3 are independently any of a single bond, $-(CH_2)_2$ -, $-(CH_2)_4$ -, $-OCH_2$ -, $-OCH_2$ -, $-CH_2O$ -, $-(CH_2)_3O$ -,

$$-O(CH_2)_2O-$$
, $-CH=CH-$, $-C=C-$, $-COO-$, $-OCO-$, $-(CF_2)_2-$, or $-CF=CF-$; $-CF_2O-$; Z^4 is a single bond.

- 9. (previously presented) A liquid-crystal composition containing at least two polymerizable compounds, in which at least one polymerizable compound is the compound of claim 1.
- 10. (previously presented) A liquid-crystal composition, which contains at least two polymerizable compounds in which all the polymerizable compounds are the compounds of claim 1.
- 11. (previously presented) A liquid-crystal composition, which contains at least two polymerizable compounds that comprise at least one compound of claim 1 and at least one polymerizable compound except the compound.
- 12. (original) A liquid-crystal composition as claimed in claim 9, which additionally contains an optically-active compound.

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13. (previously presented) A polymer having a constitutional unit of formula (2):

$$R^{1} - \left(A^{1} - Z^{1}\right)_{m} \left(A^{2} - Z^{2}\right)_{n} \left(A^{3} - Z^{3}\right)_{q} A^{4} - Z^{4} - \left(A^{5} - Z^{4}\right)_{q} A^{2} - \left(A^$$

wherein R¹ represents hydrogen, halogen, -CN, -CF₃, -CF₂H, -CFH₂, -OCF₃, -OCF₂H, -N=C=O, -N=C=S, or alkyl having from 1 to 20 carbon atoms, and any -CH₂- of the alkyl may be substituted with -O-, -S-, -CO-, -COO-, -OCO-, -CH=CH-, -CF=CF- or -C=C-, and any hydrogen thereof may be substituted with halogen or -CN; R², R³ and R⁵ each independently represent hydrogen or an alkyl having from 1 to 3 carbon atoms; A¹, A², A³ and A⁴ each independently represent 1,4-cyclohexylene, 1,4-cyclohexenylene, 1,4-phenylene, naphthalene-2,6-diyl, tetrahydronaphthalene-2,6-diyl, fluorene-2,7-diyl, bicyclo[2.2.2]octane-1,4-diyl or bicyclo[3.1.0]hexane-3,6-diyl, and in these rings, any

-CH₂- may be substituted with -O-, and any -CH= may be substituted with -N=, and in these rings, any hydrogen may be substituted with halogen or alkyl having from 1 to 5 carbon atoms; Z^1 , Z^2 and Z^3 each independently represent a single bond, -(CH₂)_a-,

$$-O(CH_2)_a$$
-, $-(CH_2)_aO$ -, $-O(CH_2)_aO$ -, $-CH$ = CH -, $-C$ = C -, $-COO$ -, $-OCO$ -, $-(CF_2)_2$ -,

 $-C = C - HC = CH - C = C - CF_2 - C$

-OCO-; and m, n and q each independently indicate 0, 1 or 2; and

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wherein when m+n+q=1, any $-CH_2$ —of the alkyl represented by R^1 is not substituted with -CO–and Z^4 is a single bond.

- 14. (original) A polymer as claimed in claim 13, in which R⁵ in formula (2) is hydrogen.
- 15. (original) A polymer as claimed in claim 13, in which R², R³ and R⁵ are hydrogen.
- 16. (original) A polymer as claimed in claim 13, in which R², R³ and R⁵ are hydrogen; A¹, A², A³ and A⁴ are independently any of 1,4-cyclohexylene or 1,4-phenylene, and any hydrogen in these rings may be substituted with halogen.
- 17. (original) A polymer as claimed in claim 13, in which R^2 , R^3 and R^5 are hydrogen; A^1 , A^2 , A^3 and A^4 are independently any of 1,4-cyclohexylene or 1,4-phenylene, and any hydrogen in these rings may be substituted with halogen; and Z^1 , Z^2 and Z^3 are independently any of a single bond, $-(CH_2)_a$, $-O(CH_2)_a$, $-(CH_2)_a$ O-,

$$-O(CH_2)_aO-$$
, $-CH=CH-$, $-C\equiv C-$, $-COO-$, $-OCO-$, $-OCF_2-$, or $-CF_2O-$.

18. (original) A polymer as claimed in claim 13, in which R^2 , R^3 and R^5 are hydrogen; A^1 , A^2 , A^3 and A^4 are independently any of 1,4-cyclohexylene or 1,4-phenylene, and any hydrogen in these rings may be substituted with halogen; Z^1 , Z^2 and Z^3 are independently any of a single bond, $-(CH_2)_a$, $-O(CH_2)_a$, $-(CH_2)_a$ O,

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 $-O(CH_2)_aO$, -CH=CH, -C=C, -COO, -OCO, $-OCF_2$, or $-CF_2O$, and Z^4 is a single bond.

19. (original) A polymer as claimed in claim 13, in which R^1 in formula (2) is hydrogen, halogen, -CN, $-CF_3$, $-CF_2H$, $-CFH_2$, $-OCF_3$, $-OCF_2H$, alkyl having from 1 to 10 carbon atoms, alkoxy having from 1 to 10 carbon atoms, alkoxyalkyl having from 2 to 10 carbon atoms, or alkenyl having from 2 to 10 carbon atoms; R^2 , R^3 and R^5 are hydrogen; A^1 , A^2 , A^3 and A^4 are independently any of 1,4-cyclohexylene or 1,4-phenylene, and in these rings, any hydrogen may be substituted with halogen; Z^1 , Z^2 and Z^3 are independently any of a single bond, $-(CH_2)_{2^-}$, $-(CH_2)_{4^-}$, $-OCH_{2^-}$, $-O(CH_2)_{3^-}$,

$$-CH_2O_-$$
, $-(CH_2)_3O_-$, $-O(CH_2)_2O_-$, $-CH=CH_-$, $-C\equiv C_-$, $-COO_-$, $-OCO_-$, $-(CF_2)_2$, $-CF=CF_-$, $-OCF_2$ or $-CF_2O_-$; Z^4 is a single bond.

20. (previously presented) A polymer that is obtained through homopolymerization of one compound of claim 1 and has a constitutional unit of formula (2):

$$R^{1} - \left(A^{1} - Z^{1}\right)_{m} \left(A^{2} - Z^{2}\right)_{n} \left(A^{3} - Z^{3}\right)_{q} A^{4} - Z^{4} - Z^{4}$$

$$R^{5} - \left(A^{1} - Z^{1}\right)_{m} \left(A^{2} - Z^{2}\right)_{n} \left(A^{3} - Z^{3}\right)_{q} A^{4} - Z^{4} - Z^{4}$$

$$R^{5} - \left(A^{1} - Z^{1}\right)_{m} \left(A^{2} - Z^{2}\right)_{n} \left(A^{3} - Z^{3}\right)_{q} A^{4} - Z^{4} - Z^{4$$

21. (previously presented) A polymer that is obtained from the liquid-crystal composition of claim 9 and has a constitutional unit of formula (2):

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$$R^{1} - \left(A^{1} - Z^{1}\right)_{m} \left(A^{2} - Z^{2}\right)_{n} \left(A^{3} - Z^{3}\right)_{q} A^{4} - Z^{4} = \begin{pmatrix} 0 & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & \\ & &$$

- 22. (previously presented) An optically-anisotropic material of the polymer of claim 13.
- 23. (previously presented) A liquid-crystal display device, which contains the polymer of claim 13.
- 24. (original) A liquid-crystal display device, which contains the optically-anisotropic material of claim 22.
- 25. (original) A method for producing a vinyl ketone compound of formula (1b), which comprises reacting one molar equivalent of a compound of formula (1a) with from 1 to 10 molar equivalents of a Lewis acid at -70°C to 200°C, followed by dehydrohalogenating the resulting compound:

$$R^{4} - \left(A^{1} - Z^{1}\right)_{m} \left(A^{2} - Z^{2}\right)_{n} \left(A^{3} - Z^{3}\right)_{q} A^{4} - Z^{4} - \left(A^{3} - Z^{3}\right$$

$$R^{4} - \left(A^{1} - Z^{1}\right)_{m} \left(A^{2} - Z^{2}\right)_{n} \left(A^{3} - Z^{3}\right)_{q} A^{4} - Z^{4} - \left(A^{3} - Z^{4}\right)_{q} A^{4} - \left(A^$$

wherein R⁴ represents hydrogen, halogen, -OH, -CN, -CF₃, -CF₂H, -CFH₂, -OCF₃,

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 $-OCF_2H$, -N=C=O, -N=C=S, or alkyl having from 1 to 20 carbon atoms, and any $-CH_2-$ of the alkyl may be substituted with -O-, -S-, -CO-, -COO-, -OCO-, -CH=CH-,

-CF=CF- or $-C\equiv C-$, and any hydrogen thereof may be substituted with halogen or -CN; R^2 , R^3 and R^5 each independently represent hydrogen or an alkyl having from 1 to 3 carbon atoms; A^1 , A^2 , A^3 and A^4 each independently represent 1,4-cyclohexylene, 1,4-cyclohexenylene, 1,4-phenylene, naphthalene-2,6-diyl, tetrahydronaphthalene-2,6-diyl, fluorene-2,7-diyl, bicyclo[2.2.2]octane-1,4-diyl or bicyclo[3.1.0]hexane-3,6-diyl, and in these rings, any $-CH_2-$ may be substituted with -O-, and any -CH= may be substituted with -N=, and in these rings, any hydrogen may be substituted with halogen or alkyl having from 1 to 5 carbon atoms; Z^1 , Z^2 and Z^3 each independently represent a single bond, $-(CH_2)_a-$, $-O(CH_2)_a-$, $-(CH_2)_aO-$, $-O(CH_2)_aO-$, -O(CH

-OCO-, -(CF₂)₂-, -C≡C-COO-, -OCO-C≡C-, -CH=CH-(CH₂)₂-, -(CH₂)₂-CH=CH-,

-CF=CF-, -C=C-HC=CH-, -CH=CH-C=C-, -OCF₂- or -CF₂O-, and a indicates an integer of from 1 to 20; Z^4 represents a single bond or α,ω -alkylene having from 1 to 4 carbon atoms, and any -CH₂- of the alkylene may be substituted with -O-, -S-, -COO- or -OCO-; m, n and q each independently indicate 0, 1 or 2; Hal represents chlorine, bromine or iodine.